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ABSTRACT

This publication introduces a series of pamphlets describing the principles, purposes, and applications of the Management Organization Systems Technique (MOST), an eclectic management system which draws from many sources of data and integrates them specifically for vital management needs. In the MOST approach, five subsystems--planning, data collection and processing, staffing and staff development, instruction, and evaluation--are precisely integrated to function as an administrative combine. The role of each subsystem in the MOST approach is explained briefly in this report. A short bibliography is appended. (JDS)

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WAYNE COUNTY COMMUNITY COLLEGE

MANAGEMENT ORGANIZATION SYSTEMS TECHNIQUE

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INTRODUCTION

One of the finest achievements during my tenure as chief executive officer of Wayne County Community College has been the recent development within its professional ranks of a comprehensive management program entitled, "Management Organization Systems Technique" (M.O.S.T.).

A prototypical concept in 1971, M.O.S.T. has evolved into a profound far-reaching system which is expected to provide the College's leadership with an excellent opportunity for coordinating the dynamic growth and development of the College, thereby being able to respond quickly and efficiently to the College's needs.

Under the direction of the Board of Trustees, the Vice Presidents and I have strongly supported and encouraged the efforts of the developmental team headed by Dr. Mostafa M. Afr, Vice President for Finance. That team has brought to fruition a comprehensive program yielding educational and service benefits to students, faculty, staff members and the community we have been entrusted to serve.

The five year development of M.O.S.T. has been worthwhile. Through the effective implementation of this management system in the months and years to come, we will be able to meet our responsibilities well, in addition to helping create for the community at large a community college truly responsive to its community's needs.

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Dr. Reginald Wilson
President

THE MANAGEMENT ORGANIZATION SYSTEMS TECHNIQUE

The M.O.S.T. approach to a management scheme for selected institutions of higher learning was developed in 1976, after several years of painstaking research, development and testing.

An eclectic system, M.O.S.T. draws from many sources of data and integrates them specifically for vital management needs, which as recent history would imply, might otherwise be overlooked or inadequately developed by a college administration.

Its specificity defines in large measure its most distinctive features: although the other management systems as named below are pertinent integers that provide conceptual models, it is M.O.S.T. which provides a precise integration of elements especially selected for modular application. Therein lies its intrinsic value.

M.O.S.T. espouses a total management approach to the administration of a college, and yet it differs from other systems in the alignment of its basic elements. Its organizational elements would be encompassed in the carefully monitored, well defined network of sub-systems operating in concert with one another. Although the inherent value of any one of the particular models may be significant, M.O.S.T. may be regarded as conceptually distinctive.

In order to describe the Management Organization Systems Technique, its objectified capabilities and balance of flexibilities --especially in terms of a unitary system designed for meeting myriad challenges wrought by kinetic social and educational demands laid daily upon the doorsteps of the community college in urban America -- we may well examine with special care the five sub-systems, which taken altogether would comprise the basic structure of the M.O.S.T. assemblage.

However, before we may adequately study the sub-systems that make up M.O.S.T. we must first reflect upon the elements that in one degree or another contribute to its structure and examine the community college environment and socioeconomic trends which will ultimately determine and define an optimum application of M.O.S.T.

In the early 1970's a tremendous initial growth of community colleges had begun to subside and within the leveling off process, a serious scrutiny of their internal organization and efficiency had begun in the community. The question of their relevancy arrived upon the public forum. Was the taxpayer's dollar being well spent?

According to the Carnegie Commission in 1972:

> Higher education in the United States has just completed its decade of greatest academic success. In the 1960's, it more than doubled its enrollments from over three million to over six million students on a full-time equivalent basis without a reduction in quality of instruction . . . Yet higher education in the early 1970's is experiencing its greatest financial crisis ... This anomalous juxtaposition of triumph and depression is a fact that must be accepted, and adjustments must be made to it. It may seen unfair to some; it may be welcomed by others; but it remains a dominant reality in higher education and in American society.[1]

In contemporary America it has become abund-

[1] Carnegie Commission, *The More Effective Use of Resources* (New York: McGraw-Hill, 1972).

antly clear that community college management has become a focal point of public interest, and, therefore, effective management must be accomplished and maintained if an institution is to survive an even-handed scrutiny.

There is need to produce a systematic approach for setting and evaluating goals; the task of assembling data necessary for making crucial decisions and formulating attendant procedures in order to provide for the continued existence of colleges through the effective application of sound total-concept planning and implementation.

The purpose of the program was to develop a conceptual base for an eclectic managment systems application that would successfully integrate the elements of management systems approaches into the community college setting. To accomplish the task, the research design included a review and analysis of current management approaches; the components of a given management systems alignment were analyzed on the basis of planning and forecasting, data base system applications, evaluation systems, organizational staffing and staff development and instructional system.

It is noteworthy that the study of each of these components was accomplished through careful documentation of successful approaches in the fields of higher education, secondary education and industry.

M.O.S.T. has been designed to provide means for the effective blending of approaches, tailored to specific need in the given environment.

One of the problems frequently encountered in the development of a planning scheme is the matter of communication between systems analysts and the educational managers, for they may differ as to orientation, philosophy and general outlook relative to methodology. An analyst may, for instance, recommend that a budget be formulated on the basis of allocations of resources *vis-a-vis* a given managerial strategy, while the managers must remain mindful of the basic elements of time, expense and training which are required in creating that system which would provide greatest overall efficiency. In short, there may exist a host of implicit inconsistencies between the design of a system and its implementation.

Although planning may be regarded as a continuous cycle, it may also be regarded as beginning with a definition of purpose and ending with the evaluation of outputs, with the original purpose held as a reference point.

Defining a college's purpose must presuppose that there will be a process whereby the degree of attainment of this purpose may be subsequently measured and evaluated.

To explicate further:

> The preliminary appraisal of alternative models should discover each system's ability to measure its performance . . . The effective selection of improvements can be accomplished only if the performance of the present system has been measured; then, as changes are introduced, the differentials can be determined.[2]

The concepts of "planning" are many, and a statement of purpose may read, for example, that the institution of learning--

> . . . provide an institutionally coherent approach to conserving, augmenting, and promulgating knowledge in consonance with the goals of larger public interests and society. Management must plan, organize and control the activities of the institution in order to accomplish this objective.[3]

[2] Stanley Young, *Management: A Systems Analysis* (Glenview, Ill.: Scott, Foresman, 1966), P. 225.

[3] George W. Baughman, "Towards a Theory of University Management," in *Management Information Systems in Higher Education*, Charles B. Johnson and William Katzenmeyer, eds. (Durham, N.C.: Duke University Press, 1969), P. 13.

The most effective way to create a specific planning model for one's own institution may be to examine those of others, noting similarities as well as differences, according to the development team. It will at the middle of the cycle of planning that the major distinctions will become apparent, since beginning and end of the cycle have presumably been established, leaving the middle scales for precise development.

Among the formal planning systems taken under consideration were (1) Planning Programming Budgeting System, which recognizes that planning and budgeting are parts of the same process, (2) Management by Objectives, a system whereby individual efforts toward the attainment of goals are kept within specific constraints of overall policy, (3) Management Information Systems, usually referred to as the data base which is needed to operate a successful planning system that would consist of a data-gathering process, (4) the School Planning Evaluation and Communication System, which addresses itself primarily to the public schools but finds relevance in the college

system, an output-oriented program-based system which includes an evaluation sub-system for matching actual and expected outcomes of programs, and (5) Western Interstate Commission of Higher Education, a coordinated data system expediting internal planning as well as external reporting and inter-college communications, rationalizing decision-making for the allocation of resources.

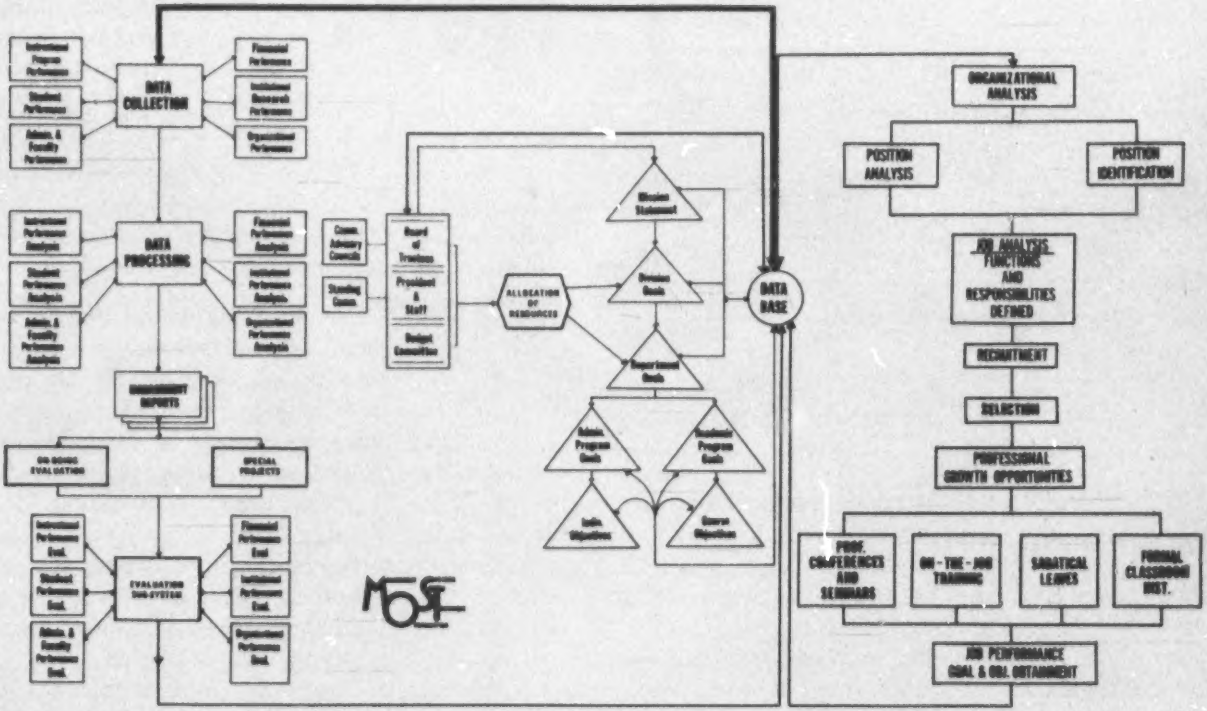
Management Skill a Key—

A selection of specific strategy based upon the evaluation of alternatives is seen as the most rational approach to planning, and it is at this point that a given information system has yielded all it can and management skill must come to the fore. No analytical technique may make decisions for those charged with the responsibility for doing so.

Most proponents for planning systems also concur that on-going information and evaluation subsystems are required in order to chart intentions and actual results. Quantification of objectives allows the evaluation sub-system to perform this task. Management information should be provided through a process of continued data collection and processing that will bring required information into the proper format for management upon a timely basis.

A complete cycle of rational planning must include several sub-systems. At a minimum these necessary elements within an institution of higher education can be summarized as follows: (1) an examination of the environment, (2) development of strategic alternatives, (3) itemization of constraints, (4) selection of strategy, (5) budgeting, (6) evaluation.

Some form of the above sub-systems may create a functional planning cycle. Of course, the creation of this system requires a monumental task of coordination and integration and there are many intricate interrelationships and minor sub-elements that have not been covered. Each of the parts listed above, along with many others, would not necessarily create a management system. Management is also a way of thinking. It must be motivational as well as rational, sociological as well as logical, personal as well as functional. Only with the commitment of resources, skills, and dedication will any system begin to work, but it is the responsibility of management to ensure that it shall work.


DATA COLLECTION
DATA PROCESSING
EVALUATION SUB-SYSTEM
ALLOCATION OF RESOURCES
DATA BASE
ORGANIZATIONAL ANALYSIS
POSITION ANALYSIS
POSITION IDENTIFICATION
JOB ANALYSIS FUNCTIONS AND RESPONSIBILITIES DEFINED
RECRUITMENT
SELECTION
PROFESSIONAL GROWTH OPPORTUNITIES
PROF. CONFERENCES AND SEMINARS
ON - THE - JOB TRAINING
SABATICAL LEAVES
FORMAL CLASSROOM INST.
JOB PERFORMANCE GOAL & OBJ. OBTAINMENT

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M. O. S. T. -- How It Works

The precise integration of five sub-systems defines the M. O. S. T. approach to college management, including instructional preparedness. It is the contention of the developmental team systems must function as an administrative combine, as a systematic unit, before the program may take optimum shape, delivering results both practical and altruistic for the community. The sub-systems under discussion are as follows:

- Planning
- Data Collection and Processing
- Staffing and Staff Development
- Instruction
- Evaluation

Each of these areas of concentration must be fully actualized in its particular realm of activity -- and yet it ought to be underscored that taken altogether, each unit must be articulated with a precision coordinated to complement the *other* processes. This is not unlike the muscular structure of the five fingers of the human hand at work. For optimum results no single process may become disproportionately significant or meager. Each will play a part according of the most effective criteria.

Perhaps a basic key to successful implementation of M. O. S. T. would be an appropriate monitoring system. Integration of the five processes in addition to full development of *each* process -- in terms of an overall design -- would ordinarily become a focal point for weighing the total effectiveness of the program's application.

Planning

In general, it may be fairly stated that to the extent a data system aids an institution in achieving its basic objectives the planning criteria are functionally effective. Planning of the kind necessary in a community college complex is essentially an objective-setting procedure, ordinarily controled on a phase-by-phase basis, culminating in a crystalization of objectives as well as the appropriate measurement of corresponding achievements. Effective development of an information system, discussed below, would provide an essential ingredient for the planning endeavor.

It follows that one of the primary goals for the college planner and the planning process would be to determine with reasonable certainty broad goals for the college. This is necessary in order to

formulate a mission statement and corresponding methods for implementation.

The *mission statement* in regard to M. O. S. T. would bear fully upon all major administrative decisions.

Once the mission statement has been sufficiently refined for publication, it may be adequately clarified for dissemination throughout the ranks of the administrative structure and professional staff. Such dissemination would ensure suitable delegation of responsibilities at all levels on a college-wide basis.

An evaluation of valid results would likely be assured, in part, through budgeting, monitoring on a functional basis, and basic controls provided at the departmental level through guidelines furnished by M. O. S. T. The system would assure a coordinated effort through precise application.

An essential element in the scheme for planning would be provisions for what has been termed measurable objectives "cascading throughout the organization," with the sum total of individual, course and departmental objectives yielding in the ultimate degree to the mission statement.

Data Collection and Processing

The M. O. S. T. data system provides (1) Input of information for initial planning, (2) Collection of performance data, gathered and processed for evaluation considerations, and (3) Storage files maintained for transactional and clerical response.

There is a wide assortment of usable forms in the area of data collection, processing, and storage, but the key operative in any thoroughgoing system is a practical overview that lends impetus to a ever-higher degree of applicable concision. A precise applicability of information, that is, must be carefully guarded, or its validity will disintegrate.

Brevity, of course, will provide no guarantee of an effective, regenerative system of information flow, and yet the college administrator must be alert to evidence of duplication of effect by both man and machine. The overlapping of informational categories, invalid criteria, inaccuracies and error, tend to result in the multiplication of irrelevancies as well as other built-in inefficiencies whether mechanical or manual. Limiting the data flow to essential matters will serve the decision-makers well, and should be strictly limited to relevant information.

The administration should also be alert to shifts in basic criteria brought about by socioeconomic trends, demographic profiles for the service area, limitations of physical plant and environment, enrollment figures and other variables worthy of interpretation.

Staffing and Staff Development

M. O. S. T. organizational staffing and staff development has been designed to integrate a conceptual base which would provide organizational analysis, training and growth opportunities, and the evaluation of employees on the basis of objective criteria.

M. O. S. T. analyzes job responsibilities in light of the *mission statement,* selecting personnel according to well established validities. In short, the program would provide an objectified evaluation mechanism.

The purpose of the organization staffing and staff development sub-system is twofold: (1) To provide a rational planning device for the integration of a mission objective and job nomenclature, and (2) To provide the needed training and evaluation mechanism for the effective implementtation of the management system approach as well as maintain and upgrade staff performance.

Instruction

Although the planning subsystem might be defined as one which includes academic planning, yet the Management Organization Systems Technique has developed a quasi-separate instructional model because of the distinctions between academic decisions and ordinary management decisions and accompanying goals.

The primary emphasis here is the requirement of formal, measurable program and course objectives as well as an information and feedback component created to assist in the process. M. O. S. T. requires that both student and instructor be made aware at the start of a program or course basis evaluation criteria. Simply put, this would necessitate a formal statement of skills to be acquired for the successful completion of a course or program in addition to a procedure for determining the level of skills acquired.

Evaluation

The function of evaluating the information generated in the data system, measuring it against the expected results as stated in the objectives, and feeding it back to the planning sub-system, comprises the most important function of the evaluation system.

Additionally, new information concerning community needs and corresponding resources must be evaluated and their projected impact upon the college presented for considerations of policy.

Conclusion

In concluding, the Developmental Team at Wayne County Community College would stress that the Management Organization Systems Technique* is a means for effecting a *total system* of management in the field of higher education.

Although the increasing complexity of the modern college and university has necessitated some reliance upon standard form, it is precisely the challenge of keeping abreast of the manifold complexities which has engendered a growing awareness of relevancy in the functional system and the validity of a mission approach for use of enlightened decision-makers.

*This publication is first in a series being planned to delineate other salient features of M.O.S.T.

BIBLIOGRAPHY

Ackoff, Russell L. "Systems Theory from an Operations Research Point if View." *General Systems: Yearbook of the Society for General Systems Research,* Vol. X, 1965.

Argyris, Chris. *Understanding Organizational Behavior.* Homewood, Illinois: The Dorsey Press, Inc., 1960.

Baughman, George W. "Towards a Theory of University Management." *Management Information Systems in Higher Education.* Edited by Charles B. Johnson and William Katzenmeyer. Durham, North Carolina: Duke University Press, 1969.

Carnegie Commission on Higher Education. *The More Effective Use of Resources.* New York: McGraw-Hill, 1972.

Carnegie Commission on Higher Education. *Priorities for Action: Final Report of the Carnegie Commission on Higher Education.* New York: McGraw-Hill Book Company, 1973.

Hirsch, Werner Z. "Education in the Program Budget." *Program Budgeting.* Edited by David Novick. Cambridge, Mass.: Harvard University Press, 1965.

Hussain, Khateeb M. *Development of Information Systems for Education.* Englewood Cliffs, N.J.: Prentice Hall, 1973.

Johnson, C. B. and W. G. Katzenmeyer (eds.). *Management Information Systems in Higher Educaion: The State of the Art.* Durham, N. C. : Duke University Press, 1969.

Nagle, John, and Walker, Harold. *S.P.E.C.S.: What It Is and What It Does.* Eugene, Oregon: C.A.S.E.A., 1975.

Odiorne, George S. *Management by Objectives.* New York: Pitman, 1973.

Odiorne, George S. *Management Decisions by Objectives.* Englewood Cliffs, N.J.: Prentice Hall, 1969.

Ross, Joel E. *Management by Information System.* Englewood Cliffs, N.J.: Prentice Hall, 1970.

Afr, Mostafa M. "An Exemplary System: Management Organization Systems Technique." Ann Arbor, Michigan. (May 1976).

Agor, Weston H. "Financing the Next Decade of Higher Education in Michigan: A Staff Report Projecting State Enrollment, Cost and Revenue Trends to 1980 and 1985." Lansing, Michigan. Higher Education Management Services, Michigan Department of Education (August 1975).

Michigan Community College Association. "Statewide Community College Services in Michigan: A Lifetime of Educational Opportunity. A Special Report with Recommendations by the Michigan Community College Association." Lansing, Michigan: MCCA, (June 1971).

MOST — MANAGEMENT SYSTEMS TECHNIQUE ORGANIZATION

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